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10/822,137	04/12/2004	Clement W. Bowman	28331.010400	1172

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EXAMINER	
WOOD, DAVID L	
ART UNIT	PAPER NUMBER
4194	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/822,137	BOWMAN, CLEMENT W.	
	Examiner	Art Unit	
	David L. Wood	4194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 5, 6, and 7 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

2. Claim 5 recites that values are “held constant” without providing any meaning. For the purposes of examination, the Examiner interprets this to mean that no "performance rating value" is added to any of the first value, second value, or third value. Based on this interpretation, claim 5 is objected to for failing to further limit the claim from which it depends, since under this interpretation, claim 5 removes a limitation from claim 4. Appropriate correct is required.

3. Claim 7 recites that “the future value" of claim 6, but claim 6 does not recite “a future value” or “the future value" but instead only introduces “a desired future value.” It is presumed that claim 7 intends to recite ”the desired future value” of claim 6, and not “the future value” of claim 4. It is also unclear how a desired future value could be achieved and yet could also deteriorate. This appears to remove a limitation of claim 6. Thus, claim 7 is objected to for failing to further limit the claim from which it depends. Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1, 3, 4, 8, and 9 and dependent claims are rejected under 35 U.S.C. 101, because the claimed invention falls within a judicial exception to patentability. The claims purport to present a method, but contain steps which are wholly or substantially abstract mental processes, bringing the invention within analysis under the judicial exception to patentability for abstract ideas. When a claim includes an abstract idea, the claim must either produce a physical transformation, or must create a result which is useful, concrete and tangible. See, generally, MPEP § 2106(IV)(C).

The Examiner appreciates the attractiveness of condensing a complex, multivariate analysis involving immeasurable characteristics to a simple two or three dimensional graph that is used in decision making. However, the specification and claims present difficulties to the patentability of this method. As disclosed in the background section of the application, the invention "provides a definitive measurement of the value ... of a[n] ... intangible asset." By common definition, an “intangible” asset has *no observable or measurable* attributes: something which is intangible is abstract. Similarly, by common definition, a “definitive” measurement would *precisely specify* a value, or be *authoritative or apparently exhaustive* as to the derivation of that value. Thus, there is a high hurdle to demonstrate that the invention is able to accomplish a goal involving mutually exclusive characteristics: a definitive measurement of something immeasurable.

The Examiner's analysis focuses on the "concrete" requirement, and does not address the "useful" or "tangible" requirements. An excerpt from the MPEP is helpful:

> "Another consideration is whether the invention produces a 'concrete' result. Usually, this question arises when a result cannot be assured. In other words, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000) (where asserted result produced by the claimed invention is "irreproducible" claim should be rejected under section 101). The opposite of 'concrete' is unrepeatable or unpredictable. Resolving this question is dependent on the level of skill in the art. For example, if the claimed invention is for a process which requires a particular skill, to determine whether that process is substantially repeatable will necessarily require a determination of the level of skill of the ordinary artisan in that field. An appropriate rejection under 35 U.S.C. 101 should be accompanied by a lack of enablement rejection under 35 U.S.C. 112, paragraph 1, where the invention cannot operate as intended without undue experimentation." MPEP § 2106(VI)(C)(2)(2)(c).

Here, the invention requires input in the form of "establishing a series of performance criteria statement," yet determining these criteria takes someone with "extensive experience." (Applicant's paragraph 0050, further discussed below about section 112). The choice of variables, determining which variables are independent of each other, the choice of performance areas, and, especially, the *scoring* of each of the performance criteria statements all require mental processes, and what amounts to unrepeatable choices, all of which affect the creation and use of the graph. This is supported by applicant's statement, in paragraph 0093, that "[d]epending upon which evaluators have undertaken the analysis, various conclusions can be drawn..."

Therefore, the invention represents a method requiring abstract mental steps, depending upon judgment which varies from person-to-person, leading to an outcome

(both the graph and the conclusions drawn from the graph) which are arbitrary, or at the very least, unrepeatable and unpredictable, necessitating people possessing skill in excess of that of the ordinary person in the art. Those claimed methods, then, are *not* concrete, and fail to overcome the judicial exception to patentability.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1, 3, 4, 8 and 9 and dependent claims are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a substantial and credible asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention. The courts have established factors for the analysis of whether a disclosure satisfies the enablement requirement. These factors, the "*Wands"* factors, include but are not limited to, several listed in MPEP § 2162.01(a), which are examined as follows.

The breadth of the claims – as further examined under the second paragraph discussion, below, several of the claims purport a wide sweeping breadth, such as to claim all use of the graph for any decision, under the Examiner's interpretation. This supports a need for a thorough disclose not present in the application for choosing variables, determining independence of variables, choose performance areas, choosing

performance criteria statements, scoring performance criteria statements, and using the chart to make a decision.

The nature of the invention – the very nature of “definitively" measuring an intangible asset suggests significant disclosure is required, but not provided, for the same factors in the previous paragraph.

The state of the prior art – the Applicant admits that prior art methods are “largely judgmental and arbitrary,” (background) suggesting the level of skill in the art is not high enough to use the present invention without undue experimentation.

The level of one of ordinary skill – the Applicant mentions that "extensive experience" is required for part of the invention, and that the skill of the evaluators affects the outcome, suggesting the need for a high degree of enablement, which is not present.

The level of predictability in the art – given the array of systems for similar analysis presented by the Applicant, and the low predictability of the results, as previously discussed, this factor also suggests the need for a high degree of enablement, which is not present.

The existence of working examples - the figures of the application suggest that there are an almost infinite number of possibilities for choices in variables and criteria, which suggests a need for extensive enablement, which is not present.

The Examiner concludes, after analysis of the *Wands* factors that the Applicant has a high burden of enablement, which is not met in the disclosure, and which requires a rejection under this section.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-5, 8, 9, 10, and 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claims 1, 4, 8, and 9 recite acting on an "intangible asset" but provide no way of determining whether an asset is intangible, or what qualifies as an asset. For the purposes of examination, the Examiner interprets an "intangible asset" to be something which has a value that cannot be measured or observed, since this is the ordinary and common meaning. One practicing a similar invention would have no way of knowing if they were infringing on these claims or not.

11. Claims 1-4, 8, and 9 recite utilizing "independent variables" but provide no way to know whether a variable is dependent or independent. One practicing a similar invention would have no way of knowing if they were infringing on these claims or not.

12. Claims 1, 3, 4, 8, 9, and 13 recite "performance criteria" but provide no way to determine what would fall within this definition. This is compounded by applicant's statement, in paragraph 0050, that "The performance criteria can be defined by persons with extensive experience in the type of organization or asset being evaluated…" since this implies that one of ordinary skill cannot make this determination. It is assumed that the rest of the sentence, "or can be selected from a data base of previously-established

matrices for similar organizations" requires someone with "extensive experience" to create the data base, since no such data base is supplied in the application.

13. Claims 1, 3, and 8 require "making at least one decision regarding the value" but places no bounds or guidelines on the decision-making process. For the purposes of examination, this phrase is interpreted to claim all possible human mental processes related to looking at the chart of the invention and drawing any conclusion, no matter how minor, from it. This is supported by applicant's statement, in paragraph 0093, that "[d]epending upon which evaluators have undertaken the analysis, various conclusions can be drawn..." since it implies *any* decision from the chart is contemplated, and that the final step in these claims creates irreproducible results.

14. Claim 2 refers to "commercial strength," "technical strength," and "societal acceptability" but no guidance is given to determine what falls within or outside the bounds of these terms in the scope of the invention, which renders the claim indefinite. For purposes of examination, "societal acceptability" is interpreted to mean any measure of acceptance by any society. One practicing a similar invention would have no way of knowing if they were infringing on this claim or not.

15. Claim 3 refers to "internal" and "external" factors, and factors that "link" them, but no instruction is provided on what falls within or outside the bounds of these terms, which renders the claim indefinite. One practicing a similar invention would have no way of knowing if they were infringing on this claim or not.

16. Claim 4 recites using "lowest performance level" but provides no way to know what constitutes the "lowest performance level" or even what "performance level", or

even “performance” means. Similarly, it is not clear if a “performance rating value” is any arbitrary value or something more specific. One practicing a similar invention would have no way of knowing if they were infringing on this claim or not.

17. Claim 6 recites factors based on the “occurrence” of events such as things which are “completed” or “improve” but no guidance is provided for what constitutes completion or whether any amount of improvement is enough to cause "occurrence."

18. Claims 10 and 12 refer to an “R factor” but provides no meaning for this term. For the purposes of examination, this term is interpreted to mean the application of any adjustment factor or arbitrary value. One practicing a similar invention would have no way of knowing if they were infringing on this claim or not.

19. Claim 13 recites the use of a “calculator template” but does not disclose if this requires the use of an electronic computing machine, or could include other methods, such as the use of a pre-printed form on paper for mental calculations. Similarly, the claim recites a “report file” with no indication of what the limits of this term are. One practicing a similar invention would have no way of knowing if they were infringing on this claim or not.

20. Claim 14 refers to “axis weighting factors” but provides no meaning for this term. For purposes of examination, this term is interpreted to mean the application of any adjustment factor or arbitrary value. One practicing a similar invention would have no way of knowing if they were infringing on this claim or not.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

22. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman, Canadian Patent Application 2172186 (Open to Public Inspection as of September 21, 1996), in view of Official Notice. (For a discussion of foreign applications open for inspection used as published documents, see MPEP § 2127, including the *Bruckelmyer* case, included with this response).

24. As to claim 1:

- Bowman discloses:
  - *A method of manufacturing a chart reflecting the value of an intangible asset of interest, (claim 1) comprising the steps of:*
  - *establishing a first independent variable, a second independent variable, … related to the value of the specific intangible asset of interest*; (claim 1)

- *establishing a matrix of performance areas;* (figures 1a-d)
- *establishing a series of performance criteria statements for each performance area probative of the value of the first, second*, (claim 1) …;
- *scoring each of said performance criteria statements to produce a plurality of scores which reflect the applicability of the performance criteria statements to the specific intangible asset of interest*; (claim 1)
- *transform[ing] physical media into a chart by physically plotting on the media a first axis relating to the first independent variable, a second axis relating to the second independent variable, …* ; (claim 1)
- *plot[ting] a point on the chart, the point being located at coordinates corresponding to the first, second, … total scores, respectively; and* (claim 1)
- *using the chart in making at least one decision regarding the value of the intangible asset of interest*. (claim 1)

- Bowman does not disclose:
  - *a third independent variable*
  - *storing in an electronic database;*
  - *using a computing apparatus to read and sum the stored plurality of scores to generate first, second, and third total scores based upon the extent to which individual statements accurately describe the intangible asset of interest;*
  - using a printer

- The Examiner takes Official Notice of the following.
    - At the time of the invention, it was common for those of ordinary skill in the art: to store values electronically (in a calculator memory, computer spreadsheet, file, or database); to use a computing apparatus to retrieve and sum numeric values; and to use a printer to create written materials.
    - If an analysis of something immeasurable is attempted, using a third variable, in addition to a first and second variable, would have been commonly employed.
- It would have been obvious to one of ordinary skill in the art to modify the teachings of Bowman by including the additional features of Official Notice, because each component would perform the same function in combination as before combination, with predictable results, and because using computers to automate manual and mental tasks was being employed in countless situations by the mid-1990's, and because any analysis is made more precise with the inclusion of additional independent variables.

25. Claim 8 is rejected using the same reasoning as claim 1, since the two claims differ only by the addition of the third variable of claim 1.

26. As to claim 2, Bowman discloses (claims 6-8, 15, 16):

- wherein the first independent variable relates to commercial strength, the second independent variable relates to technical strength, and the third independent variable relates to societal acceptability.

27. Claim 3 is rejected using the same reasoning as claim 1, with the following additions disclosed by Bowman:

- *establishing three columns in the matrix, wherein a first column comprises performance areas regarding internal factors, a second column comprises performance areas regarding external factors, and a third column comprises performance areas that link the internal and external factors*; (figure 1b).

28. Claim 4 is rejected using the same reasoning as claim 1, with the following additions from Bowman and Official Notice:

- Bowman discloses using the invention to deal with future values (figure 1a, column c – "sustainability" and "long term corporate plan", figure 1d, cell 2c – "potential").
- The Examiner takes Official Notice that it was common at the time of the invention when using current information to make projections of future value to adjust those values based on various confidence factors related to how likely the future value of an asset is likely to depend on the current information or not, such as with a *performance rating value*.

29. Claim 5 is rejected using the same reasoning as claim 4, since to not apply the performance rating value means the first value is held constant, and the value could be zero, leading to holding the value constant.

30. As to claim 6, Bowman and Official Notice disclose the limitations of claim 4, and further disclose the limitations of claim 6 because:

- The Examiner takes Official Notice that when a desired future value includes factors such as improving *competitive position*, when *the competitive position improves* the desired future value would have been achieved, and accountants and managers typically note this through some means of recording or communication to the business, which is often expressed in terms coded to a particular entity's language.

31. As to claim 7:

- Bowman and Official Notice disclose the limitations of claims 4 and 6.
- The Examiner takes Official Notice that businesses and other entities typically measure improvement or deterioration against goals such as whether current development projects are complete or whether business factors change, and these results are often plotted, such as a chart showing profits over time.
- It would have been obvious to one of ordinary skill in the art to combine the value teachings of Bowman with the teachings of Official Notice to plot changes in monitors attributes, because it is commonly done.

32. As to claims 9-12:

- Bowman and Official Notice disclose the limitations of claim 8, but do not disclose using underlying matrices and adjustment and scoring factors.
- The Examiner takes Official Notice that the techniques described in claims 9-12 match the analytical process that is at the heart of the Kepner-Tregoe tabled scoring system used for multiple variables that are considered in a complex decision, as commonly practiced throughout many industries since the 1960's.

- It would have been obvious to one of ordinary skill in the art to combine the value teachings of Bowman with the analytical thoroughness of Kepner-Tregoe, because each would perform its function after combination in the same way as before combination, with predictable results, and because K-T analysis was widely employed for multi-variable, difficult-to-quantify decisions as envisioned by the present invention.

33. As to claim 13:

- Bowman and Official Notice disclose the limitations of claim 8, but do not address using a calculator template or report file.
- The Examiner takes Official Notice that it was well known in the art at the time of the invention to perform the following using a computer spreadsheet or electronic calculator:
    - *entering as data of least one assessment of the performance criteria; opening a calculator template; transferring the data to the calculator template, wherein the calculator template performs calculations on the data to create calculated data; transferring the calculated data from the calculator template to a report template; and creating a report file for the calculation data*.
- It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bowman with the calculating and reporting actions of Official Notice, because each would perform its function after combination in the same manner as before combination, with predictable results,

and because once computer spreadsheets and electronic calculators were in common use, they were commonly employed for performing and reporting on both simple and complex computations.

34. As to claim 14:

- Bowman and Official Notice disclose the limitations of claims 8 and 13.
- Official Notice further inherently discloses (since spreadsheets and calculators commonly sum numbers representing scores):
    - *summing of scores, applying axis weighting factors, or generating data describing a valuation grid and a point on the valuation grid*.

35. As to claim 15, Official Notice further discloses (since saving results in computer spreadsheets to computer storage medium is inherent in using computer spreadsheets):

- *saving the report file*.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to David L. Wood whose telephone number is (571)270-3607. The Examiner can normally be reached on Monday through Friday 7:30 to 5:00 EST.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Charles Kyle can be reached on 571-272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David L. Wood/
Examiner, Art Unit 4194
March 28, 2008

/Charles R. Kyle/
Supervisory Patent Examiner, Art Unit 4194